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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,043	09/26/2003	Daniel White Sexton	125836	1099
41838 7590 01/18/2008 GENERAL ELECTRIC COMPANY (PCPI) C/O FLETCHER YODER P. O. BOX 692289 HOUSTON, TX 77269-2289			EXAMINER SINKANTARAKORN, PAWARIS	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 01/18/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/672,043

**Applicant(s)**

SEXTON ET AL.

T/H

**Examiner**

Pao Sinkantarakorn

**Art Unit**

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see page 2 of the remarks, filed 1/7/2008, with respect to the rejection(s) of claim(s) 1, 10, and 18 under 102(e) and 103(a) rejections have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art references.
2. The finality of the rejection made in the Office Action mailed on 11/5/2007 is withdrawn in order to apply a new ground of rejection.
3. Claims 1-20 are currently pending in the application.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Scott et al. (newly cited US 5,953,340).

**Regarding claim 1**, Scott et al. disclose a network communication device for bi-directional communication networks, comprising:

a first portion (see Figure 6 reference numeral 172, switch module) connectable to a first point and a second point on the bi-directional communication network (see

Figure 6, a first point corresponds to the converter 174 and a second point corresponds to interface circuits 160), the first portion being configured to manage collisions among a first set of messages transmittable from the first point to the second point (see column 10 lines 2-4 and 47-58, the converter transmits the data to the switch module, where the switch module filters the data packets to avoid collisions); and

a second portion (see Figure 6 reference numeral 176, repeater module) connectable to the first point and the second point (see Figure 6, a first point corresponds to the converter 174 and a second point corresponds to interface circuits 160), the second portion being configured to transmit free of collision management a second set of messages transmittable from the second point to the first point (see column 10 lines 45-50, the repeater module transmits received data to all of the ports, which corresponds to free of collision management);

**regarding claim 2**, the first and second messages are selected from the group consisting of electrical messages, optical messages, acoustic messages, and any combinations thereof (see column 4 line 50, Ethernet LAN);

**regarding claim 3**, the first portion is a network switch (see Figure 6 reference numeral 172, switch module);

**regarding claim 4**, the network switch is an analog switch or a digital switch (see column 4 line 50, digital switch)

**regarding claim 5**, the second portion is a network hub (see Figure 6 reference numeral 176, repeater module);

**regarding claim 6**, the network hub is an analog hub or a digital hub (see column 4 line 50, digital repeater);

**regarding claim 7**, the first and second portions are separate devices or a single device (see Figure 6 reference numerals 172 and 176);

**regarding claim 8**, further comprising a plurality of network connections for connecting the first and second portions to the first and second points (see Figure 6, a first point corresponds to the converter 174 and second points corresponds to interface circuits 160);

**regarding claim 9**, the plurality of network connections are standardized Ethernet cable connections (see column 4 line 50, Ethernet LAN).

**Regarding claim 10**, Scott et al. disclose a bi-directional communication device comprising:

a hub portion (see Figure 6 reference numeral 176, repeater module);

a switch portion (see Figure 6 reference numeral 172, switch module);

a first plurality of connections for connecting the hub portion to a plurality of first points on a bi-directional communication network (see Figure 6, a plurality of first points corresponds to interface circuits 160 and column 10 lines 45-50, the repeater module transmits and receives data to/from the data devices in the second domain 16) and to a second point on the bi-directional communication network (see Figure 6, a second point corresponds to the converter 174 and column 10 lines 2-4 and 47-58, the converter transmits and receives the data to/from the repeater module); and

a second plurality of connections for connecting the switch portion to the plurality of first points and to the second point (see Figure 6, a plurality of first points corresponds to interface circuits 160 and column 10 lines 2-4 and 45-58, the switch module transmits and receives data to/from the data devices in the second domain 16 and the converter transmits and receives the data to/from the switch module);

**regarding claim 11**, the hub portion is configured to transmit first messages from the second point to the plurality of first points (see column 10 lines 45-47, the repeater module transmits data from the converter to the interface circuits);

**regarding claim 12**, the hub portion is configured to transmit the first messages without collision management (see column 10 lines 45-50, the repeater module transmits received data to all of the ports, which corresponds to free of collision management);

**regarding claim 13**, the switch portion is configured to transmit second messages from the plurality of first points to the second point (see column 10 line 36 – column 11 line 11);

**regarding claim 14**, the switch portion is configured to manage collisions among the second messages (see column 10 lines 2-4 and 47-58, the switch module filters the data packets to avoid collisions);

**regarding claim 15**, the network switch and the network hub are analog devices, digital devices, or any combination thereof (see column 4 line 50, digital switch/hub);

**regarding claim 16**, the hub and switch portions are separate devices or a single device (see Figure 6 reference numerals 172 and 176);

**regarding claim 17**, the first and second plurality of connections are standardized Ethernet cable connections (see column 4 line 50, Ethernet LAN).

**Regarding claim 18**, Scott et al. disclose a method of communicating messages on a bi-directional communication network, comprising:

transmitting a first message from each of a plurality of first points on the bi-directional communication network to a single second point on the bi-directional communication network through a switch portion of a communication device (see column 10 lines 36-40, the switch module receives data sent from the data devices in the first domain to the converter module, wherein the data devices correspond to a plurality of first points and the converter module corresponds to a single second point); and

transmitting a second message from the single second point to the plurality of first points through a hub portion of the communication device (see column 10 lines 43-47, the converter module sends data to the repeater module, then the repeater module transmits the data to all of the ports coupled to the second domain, wherein the converter module corresponds to a single second point and the ports coupled to the second domain correspond to the plurality of first points);

**regarding claim 19**, the switch and hub portions are analog devices, digital devices, or any combinations thereof (see column 4 line 50, digital switch/hub);

**regarding claim 20**, the switch and hub portions are separate devices or a unitary device (see Figure 6 reference numerals 172 and 176).

***Conclusion***

6. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pao Sinkantarakorn whose telephone number is 571-270-1424. The examiner can normally be reached on Monday-Thursday 9:00am-3:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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PS



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